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09/708,514

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Q61721

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03/10/2006

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EXAMINER

DO, AN H

ART UNIT

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/708,514  
Filing Date: November 09, 2000  
Appellant(s): KITAHARA, TSUYOSHI

**MAILED**

**MAR 10 2006**

**GROUP 2800**

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Allison M. Tulino  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 13 January 2005 appealing from the Office action mailed 13 September 2004.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

Nakamura (JP 06-023982)

Usui et al (US 6,158,847)

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Nakamura (JP 06-023982).

Nakamura et al discloses all features of the claimed recording head as follows:

- A pressure producing device (11)
- A plate-shaped member having a partition wall (3) defining a pressure chamber (4), and ink supply passage (5) and a common ink storage chamber (6)
- The plate-shaped member having a land (9) and an elastic and deformation portion surround the land (clearly illustrated in Figure 2)
- A nozzle plate (1) provided with a nozzle hole (2)
- The plate-shaped member having a first layer (the one forming 3), a second layer (the one forming 9), and an intermediate polymer layer (8)
- Note: the processes recited in the claims are not further limit the apparatus because it does not further define any structure of the claimed apparatus.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2853

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 4 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura (JP 06-023982) in view of Usui et al (US 6,158,847).

Nakamura et al discloses the basic limitations of the claimed invention as set forth above and further includes the followings:

- A first adhesive (21) layer bonding the second layer (9) and the intermediate layer (8) and the first layer being formed of stainless steel.

However, Nakamura et al do not disclose:

- A second adhesive layer bonding the first layer (3) and the intermediate layer (8) and the first layer being formed of stainless steel.

Usui et al teach:

- An adhesive layer (7) bonding a stainless steel layer (1) forming a spacer likes the first layer and the diaphragm (5)

It is noted that Nakamura et al's diaphragm (7) includes the intermediate layer (8) having a surface facing the first/spacer layer (3). Such surface is similar to the surface of Usui et al's diaphragm (5). It would have been obvious to one having ordinary skill in the art at the time the invention was made to include an adhesive layer between the first/spacer layer and the surface of the diaphragm facing the first/spacer layer as taught by Usui et al in the teaching of Nakamura et al for the purpose of bonding the diaphragm to the spacer layer.

### **(10) Response to Argument**

Appellant's arguments filed 13 January 2005 have been fully considered but they are not persuasive. Appellant argued that that Nakamura does not disclose or suggest a plate-shaped member having an etched partition wall formed on a front surface and an etched land formed on a back surface, as recited in claim 1 (page 12, second paragraph). However, product-by-process claims are not limited to the manipulations of the recited steps/processes, only the structure implied by the processes (MPEP 2113). Therefore, the method that the layers are formed, i.e. etching is not relevant. Appellant further argued that the etching process provides certain advantages to the final product (page 13, last paragraph) and that etching glass is obviously structurally different from etching non-glass (page 14, first sentence). However, only the claimed structure is limiting as the above case law makes clear. Furthermore, appellant has not met a burden of proof as to why etching performs a different structure. Rather, appellant merely claimed the structural limitation "etched" and argued the claimed "etched" limitation is different and distinct from the one as disclosed by Nakamura. This fails the burden. Appellant also argued that it would be impossible to form a tapered vertical line and a non-tapered vertical line using the same etching process (page 14, third paragraph). However, the etching can be performed by using any process in order to obtain the final product such as the etched spacer 3 with a tapered vertical line and a non-tapered vertical line as shown in Figure 2 of Nakamura. Additionally, the examiner maintains that laser ablation could be used instead of etching, for example. For these reasons, the rejection is maintained.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



An H. Do  
Examiner  
Art Unit 2853



**STEPHEN MEIER**  
**SUPERVISORY PATENT EXAMINER**

Conferees:

Stephen Meier 

Drew Hirshfeld 